

REMARKS

Favorable reconsideration of this application in light of the following discussion is respectfully requested.

Claims 1-7, 9-13, and 16-19 are presently active in this case.

In the outstanding Official Action, Claims 1-3, 9, 16, and 18 were rejected under 35 U.S.C. 102(b) as being anticipated by Robertson et al. (U.S. Patent No. 3,733,702). Claims 4-7, 10-13, 17, and 19 were rejected under 35 U.S.C. 103(a) as being unpatentable over Grylls et al. (U.S. Patent No. 4,188,407) in view of Robertson et al. For the reasons discussed below, the Applicants respectfully traverse these art rejections.

In the Office Action, the Robertson et al. reference is indicated as anticipating independent Claims 1 and 18. However, the Applicants note that a claim is anticipated only if each and every element as set forth in the claims is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). As will be demonstrated below, the Robertson et al. reference clearly does not meet each and every limitation of independent Claims 1 and 18.

Claims 1 and 18 of the present application each recite a stirred tank comprising, among other features, a tank body, a jacket disposed on a periphery of the tank body within which a cooling medium is circulated, and a stirring impeller so constructed that a maximum diameter of a rotation body defined by the rotation of the stirring impeller is 60-90% of the inner diameter of the stirred tank. The Applicants respectfully submit that the Robertson et al. reference does not disclose all of the above limitations of Claims 1 and 18.

The Applicants submit that the Robertson et al. reference clearly does not disclose a

stirring impeller so constructed that a maximum diameter of a rotation body defined by the rotation of the stirring impeller is 60-90% of the inner diameter of the stirred tank, as recited in Claim 1 and 18 of the present application. The Official Action cites column 1, lines 37-42, of the Robertson et al. reference for the teaching of such a feature. However, the Applicants note that this portion of the Robertson et al. reference states that the invention described therein includes a *plurality of agitators* having vertical blades arranged so as to effectively sweep almost all of the volume of the tank. The description of the invention in the Robertson et al. reference clearly indicates that the individual agitator blades and shafts are each pivotally mounted in a fixed location within the tank, such that each individual agitator blade sweeps in a circular motion around its shaft (46), but that the shaft (46) is fixed at a particular location within the tank. Note that the shafts even extend through apertures (40) in the cutter frame (36) and are mounted within fixed bearing on the top and bottom of the tank, which would prevent the rotation of the shafts about the center axis of the tank itself. Thus, it is clear that the Robertson et al. reference does not disclose a stirring impeller so constructed that a maximum diameter of a rotation body defined by the rotation of the stirring impeller is 60-90% of the inner diameter of the stirred tank, as is expressly recited in Claim 1 and 18 of the present application.

Claims 1 and 18 recite a stirring impeller so constructed that a maximum diameter of a rotation body defined by the rotation of the stirring impeller is 60-90% of the inner diameter of the stirred tank. Thus, the recited impeller has a rotation body with the recited diameter relationship that is defined by the rotation of that stirring impeller. In the Robertson et al.

reference, each individual agitator defines a rotation body that is clearly less than 50% of the inner diameter of the tank, as is evident from a review of Figures 1 and 2 of the Robertson et al. reference. Each individual agitator does not “effectively sweep almost all of the volume of the tank,” but rather all of the agitators together perform this function. The Robertson et al. reference does not include an individual agitator that has a maximum diameter of a rotation body defined by the rotation of the agitator that is 60-90% of the inner diameter of the tank.

The proportion setting between the maximum diameter of the rotation body defined by the rotation of the stirring impeller and the inner diameter of the stirred tank is made based on the assumption that only an individual stirring impeller satisfies this limitation. That is, it does not make sense to set the proportion between the maximum diameter of the rotation body and the inner diameter of the stirred tank in an apparatus provided with plural agitators each having plural blades, which consequently define plural rotation bodies in the tank.

Therefore, the Robertson et al. clearly does not disclose all of the limitations recited in Claims 1 and 18 of the present application, and thus the Robertson et al. reference does not anticipate Claims 1 and 18 or the claims that depend therefrom. Accordingly, the Applicants request the withdrawal of the anticipation rejection.

Regarding the obviousness rejections of independent Claims 4 and 19, the Applicants note that the basic requirements for establishing a *prima facie* case of obviousness as set forth in MPEP 2143 include (1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the

art, to modify the reference or to combine reference teachings, (2) there must be a reasonable expectation of success, and (3) the reference (or references when combined) must teach or suggest all of the claim limitations. The Applicants submit that a *prima facie* case of obviousness has not been established in the present case because the cited references, either when taken singularly or in combination, do not teach or suggest all of the claim limitations.

Claims 4 and 19 each recite a method of manufacturing beer comprising, among other features, providing a stirring impeller so constructed that a maximum diameter of a rotation body defined by the rotation of the stirring impeller is 60-90% of the inner diameter of the stirred tank, and a jacket disposed on a periphery of the tank body within which a cooling medium is circulated.

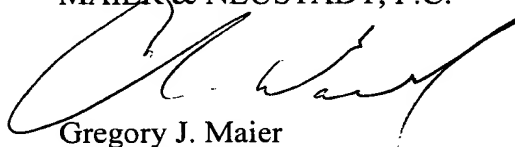
The Official Action acknowledges on page 3 that the Grylls et al. reference does not disclose an impeller having the specific dimensions recited in Claims 4 and 19. For the reasons discussed in detail above with respect to the anticipation rejection, the Applicants note that the Robertson et al. reference does not disclose a stirring impeller so constructed that a maximum diameter of a rotation body defined by the rotation of the stirring impeller is 60-90% of the inner diameter of the stirred tank. Thus, neither the Grylls et al. reference nor the Robertson et al. reference teaches this feature. Accordingly, the Applicants submit that a *prima facie* case of obviousness has not established with respect to Claims 4 and 19, or the claims that depend therefrom, based on the proposed combination of the Grylls et al. reference and the Robertson et al. reference. Thus, the Applicants respectfully request the withdrawal of the obviousness rejection.

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Consequently, in view of the above discussion, it is respectfully submitted that the present application is in condition for formal allowance and an early and favorable reconsideration of this application is therefore requested.

Respectfully Submitted,

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